



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,207	01/21/2004	Mark Nadel	C0989.70037US00	2512

7590 09/26/2006

Walt Norfleet
Wolf, Greenfield & Sacks, P.C.
600 Atlantic Avenue
Boston, MA 02210

EXAMINER

SIMS, JASON M

ART UNIT	PAPER NUMBER
----------	--------------

1631

DATE MAILED: 09/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/762,207	Applicant(s) NADEL ET AL.	
	Examiner Jason M. Sims	Art Unit 1631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 66-134 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 66-134 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 66-99 and 134, drawn to a method of analyzing a polymer, classified in class 702, subclass 19. If this group is elected, then the below summarized specie election is also required.
- II. Claims 100-133, drawn to computer-readable medium having computer readable signals stored that define instructions that perform a method of determining a separation distance between a first and a second label on a polymer comprising multiple steps, classified in class 710, subclass 74. If this group is elected, then the below summarized specie election is also required.

Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another and materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case invention I is a process of a method of analyzing a polymer and invention II is a product, which is a computer-readable medium having computer readable signals/apparatus that perform a method of determining a separation distance between a first and a second label on a polymer comprising multiple steps. Therefore, groups I and II are distinct due to group one being drawn to a process and group II being drawn to a product or apparatus for its practice.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Group I Election of Species

This application contains claims directed to the following patentably distinct species of calculating the proportion of the first emission signal in claims 67 and 69:

- A) dividing a first portion of the first signal that is detected before the timing event by all of the first signal; claim 67 If this group is elected, then the below summarized two subspecies elections are also required.
- B) dividing a second portion of the first signal that is detected before the timing event by all of the first signal; claim 69

The species are independent or distinct because they have unique modes of operation due to their unique mathematical calculations.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Currently, Claim 66 is generic.

One of Two Group A Subspecies Election

This application contains claims directed to the following patentably distinct species of timing events in claims 72, 75, and 78:

- 1) A timing event comprises a single timing event for calculating the proportion of the first emission signal and calculating the proportion of the second emission

signal; claim 72

2) A timing event comprises two distinct timing events, a first timing event for calculating the proportion of the first emission signal and a second timing event that occurs one reset time immediately after the first timing event, the second timing event for calculating the proportion of the second emission signal; claim 75 If this group is elected, then the below summarized subspecie election is also required.

3) A timing event comprises two distinct timing events, a first timing event for calculating the proportion of the first emission signal and a second timing event that occurs later and is separated by one or more timing events within a series of timing events, the second timing event for calculating the proportion of the second emission signal, claim 78 If this group is elected, then the below summarized subspecie election is also required.

The species are independent or distinct because they have unique modes of operation.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Currently, Claims 66-68 are generic.

Two of Two Group A Subspecie Election

This application contains claims directed to the following patentably distinct species of determining a separation distance in claims 73-74:

4) multiplying the proportion of the first signal and the proportion of the second signal by the zone distance to define a first distance and a second distance, respectively; and then subtracting the second distance from the first distance to define the separation distance; claim 73

5) subtracting the proportion of the second signal from the proportion of the first signal to define a separation factor; and then multiplying the separation factor by the zone distance to define the separation distance; claim 74

The species are independent or distinct because they have unique modes of operation due to their unique mathematical calculations.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Currently, Claims 66-68 and 71-72 are generic.

Group II Subspecie Election

This application contains claims directed to the following patentably distinct species of calculating a reset distance in claims 76 and 77:

C) multiplying the velocity by the reset time; wherein determining the separation distance comprises multiplying the proportion of the first signal and the proportion of the second signal by the zone distance to define a first distance and a second distance, respectively; then subtracting the second distance from the first distance; and then adding the reset distance to the first distance to define the separation distance; claim 76

D) multiplying the velocity by the reset time; wherein determining the separation distance comprises subtracting the proportion of the second signal and the proportion of the first signal to define a separation factor; then multiplying the separation factor by the zone distance; and then adding the reset distance to define the separation distance claim 77

The species are independent or distinct because they have unique modes of operation due to their unique mathematical calculations.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Currently, Claims 66-68, 71, and 75 are generic.

Group III Subspecie Election

This application contains claims directed to the following patentably distinct species of calculating a reset distance in claims 79 and 80:

E) multiplying the velocity by the reset time; wherein determining the separation distance comprises multiplying the proportion of the first signal and the proportion of the second signal by the zone distance to define a first distance and a second distance, respectively; and further wherein the second distance is subtracted from the first distance and a number of reset distances equivalent to the number of timing events, are added to the first distance to define the separation distance; claim 79

F) multiplying the velocity by the reset time; wherein determining the separation

Art Unit: 1631

distance comprises subtracting the proportion of the second signal from the proportion of the first signal; and further wherein the separation factor is multiplied by the zone distance and a number of reset distances equivalent to the number of timing events, are added to define the separation distance; claim 80

The species are independent or distinct because they have unique modes of operation due to their unique mathematical calculations.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Currently, Claims 66-68 and 78 are generic.

Group II Election of Species

This application contains claims directed to the following patentably distinct species of calculating the proportion of the first emission signal in claims 101 and 103:

- A) dividing a first portion of the first signal that is detected before the timing event by all of the first signal; claim 101 If this group is elected, then the below summarized two subspecies elections are also required.
- B) dividing a second portion of the first signal that is detected before the timing event by all of the first signal; claim 103

The species are independent or distinct because they have unique modes of operation due to their unique mathematical calculations.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Currently, Claim 100 is generic.

One of Two Group A Subspecie Election

This application contains claims directed to the following patentably distinct species of timing events in claims 106, 109, and 112:

- 1) A timing event comprises a single timing event for calculating the proportion of the first emission signal and calculating the proportion of the second emission signal; claim 106
- 2) A timing event comprises two distinct timing events, a first timing event for calculating the proportion of the first emission signal and a second timing event that occurs one reset time immediately after the first timing event, the second timing event for calculating the proportion of the second emission signal; claim 109 If this group is elected, then the below summarized subspecie election is also required.
- 3) A timing event comprises two distinct timing events, a first timing event for calculating the proportion of the first emission signal and a second timing event that occurs later and is separated by one or more timing events within a series of timing events, the second timing event for calculating the proportion of the second emission signal, claim 112 If this group is elected, then the below summarized subspecie election is also required.

The species are independent or distinct because they have unique modes of operation.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Currently, Claims 100-102 are generic.

Two of Two Group A Subspecie Election

This application contains claims directed to the following patentably distinct species of determining a separation distance in claims 107-108:

- 4) multiplying the proportion of the first signal and the proportion of the second signal by the zone distance to define a first distance and a second distance, respectively; and then subtracting the second distance from the first distance to define the separation distance; claim 107
- 5) subtracting the proportion of the second signal from the proportion of the first signal to define a separation factor; and then multiplying the separation factor by the zone distance to define the separation distance; claim 108

The species are independent or distinct because they have unique modes of operation due to their unique mathematical calculations.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Currently, Claims 100-102 and 105-106 are generic.

Group II Subspecie Election

This application contains claims directed to the following patentably distinct species of calculating a reset distance in claims 110-111:

C) multiplying the velocity by the reset time; wherein determining the separation distance comprises multiplying the proportion of the first signal and the proportion of the second signal by the zone distance to define a first distance and a second distance, respectively; then subtracting the second distance from the first distance; and then adding the reset distance to the first distance to define the separation distance; claim 110

D) multiplying the velocity by the reset time; wherein determining the separation distance comprises subtracting the proportion of the second signal and the proportion of the first signal to define a separation factor; then multiplying the separation factor by the zone distance; and then adding the reset distance to define the separation distance claim 111

The species are independent or distinct because they have unique modes of operation due to their unique mathematical calculations.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Currently, Claims 100-102, 105, and 109 are generic.

Group III Subspecie Election

This application contains claims directed to the following patentably distinct

Art Unit: 1631

species of calculating a reset distance in claims 113-114:

E) multiplying the velocity by the reset time; wherein determining the separation distance comprises multiplying the proportion of the first signal and the proportion of the second signal by the zone distance to define a first distance and a second distance, respectively; and further wherein the second distance is subtracted from the first distance and a number of reset distances equivalent to the number of timing events, are added to the first distance to define the separation distance; claim 113

F) multiplying the velocity by the reset time; wherein determining the separation distance comprises subtracting the proportion of the second signal from the proportion of the first signal; and further wherein the separation factor is multiplied by the zone distance and a number of reset distances equivalent to the number of timing events, are added to define the separation distance; claim 114

The species are independent or distinct because they have unique modes of operation due to their unique mathematical calculations.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Currently, Claims 100-102 and 112 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species.

MPEP § 809.02(a).

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions

unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Sims, whose telephone number is (571)-272-7540.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Andrew Wang can be reached via telephone (571)-272-0811.

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the Central PTO Fax Center. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR § 1.6(d)). The Central PTO Fax Center number is (571)-273-8300.

Any inquire of a general nature or relating to the status of this application should be directed to Legal Instrument Examiner, Yolanda Chadwick, whose telephone number is (571)-272-0514.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

John S. Brusca 19 September 2006

JOHN S. BRUSCA, PH.D
PRIMARY EXAMINER